

IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

**Patent Application**

Inventor(s) Eric Henry Grosse  
Case 7  
Serial No. 10/776,719 Group Art Unit 2109  
Filing Date February 11, 2004  
Examiner Benjamin A Kaplan  
Title Method And Apparatus For Defending Against Denial Of Service Attacks  
Which Employ IP Source Spoofing

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
ALEXANDRIA, VA 22313-1450

SIR:

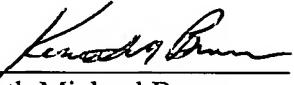
**DECLARATION UNDER 37 C.F.R. 1.132**

1. I, Kenneth Michael Brown, am and have been during the relevant time periods hereof a registered U.S. patent attorney (Reg. No., 37,590) employed by Lucent Technologies Inc. and charged with, *inter alia*, the preparation and filing of U.S. patent applications in the USPTO (United States Patent and Trademark Office).
2. Prior to December 25, 2003, I received a "Disclosure of Invention" document describing an invention which was given the descriptive title of "IP CallerID" from Eric Henry Grosse, a member of the technical staff of Bell Laboratories, which is a division of Lucent Technologies Inc. A copy of this "Disclosure of Invention" document is attached hereto as Exhibit A.

3. After having received the aforementioned "Disclosure of Invention" document but also prior to December 25, 2003, I sent a confirmatory letter to Mr. Grosse indicating that the process of considering his submitted invention for possible filing as a patent application had begun. A copy of this letter is attached hereto as Exhibit B.

4. Between the date of the aforementioned letter and February 11, 2004, the aforementioned invention submitted by Mr. Grosse was examined and considered for possible filing and a decision to file a U.S. patent application covering the subject matter thereof was ultimately made. After that decision was made, and up until February 11, 2004, the drafting of such a patent application document was performed by me, commencing with the filing in the USPTO of a final version thereof on February 11, 2004. The application as filed claimed the invention as generally set forth in the aforementioned "Disclosure of Invention" document.

5. I certify that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true. I also understand that willful false statements and the like are punishable by fine, imprisonment or both under 18 U.S.C. 1001 and that willful false statements and the like may jeopardize the validity of the application-at-issue or any patent issuing thereon.

  
\_\_\_\_\_  
Kenneth Michael Brown  
Reg. No. 37590  
908-582-5998

Date: 9/4/07

Class number: \_\_\_\_\_

Criterion letter: \_\_\_\_\_

# EXHIBIT A

## PRIVILEGED AND CONFIDENTIAL ATTORNEY-CLIENT COMMUNICATION

For Patent Dept. Use Only

LUCENT TECHNOLOGIES, INC.

### DISCLOSURE OF INVENTION

THIS DESCRIPTION SHOULD BE SUPPLEMENTED BY ATTACHING COPIES OF RELEVANT DOCUMENTS, SUCH AS TECHNICAL MEMORANDA, PUBLISHED OR TO-BE-PUBLISHED ARTICLES, AND ENGINEERING NOTEBOOK PAGES.

(Also, if for any item there is insufficient space on the form, attach additional pages as necessary.)

DESCRIPTIVE TITLE OF THE INVENTION: IP CallerID

SUBMITTER #1:	Eric Grosse	Lucent Technologies, Murray Hill, NJ
	Name (Print)	Company/Location
	908-582-5828	Wim Sweldens
	Phone/E-mail	Director's Name

SUBMITTER #2:	Name (Print)	Company/Location
	Phone/E-mail	Director's Name

SUBMITTER #3:	Name (Print)	Company/Location
	Phone/E-mail	Director's Name

#### 2. PRIMARY CONTACT

If more than one Submitter is named above, who will have the primary responsibilities for interfacing with Lucent IP-Law with respect to preparing and prosecuting a patent application for the invention?

Submitter Name: \_\_\_\_\_

#### 3. PRESENT STATE OF THE INVENTION

Manufacture (Product Name) \_\_\_\_\_

Estimated Ship Date \_\_\_\_\_

#### 4. GOVERNMENT CONTRACT INVENTION

Was the invention made under a government contract?

Yes     No

5. PRESENT STATE OF THE ART

Briefly describe the closest already-known technology that relates to the invention. This would include, for example, already existing products, methods or compositions which are known to you personally or through descriptions in publications or patents.

Ingress filtering is well known, for example IETF RFC 2267.

6. ADVANCEMENT IN STATE OF THE ART

Briefly describe the unique advancement achieved by the invention. This may be done, for example, by describing a problem with the prior art that is solved or specific objects that are achieved by the invention.

I am not aware of any provisions like this for incremental deployment of ingress filtering.

7. HOW ACHIEVED

Briefly describe the invention and how it achieves the advancement described in paragraph 6.

The idea is to use some currently little-used bits in the IP header to record whether the packet came from a verified source or not.

8. DISCLOSURE OUTSIDE OF LUCENT

Anticipated Publication Date: \_\_\_\_\_ Publication Name: \_\_\_\_\_

Submitted to Publication Clearance?  Yes  No

If the invention was or will otherwise be disclosed to any non-Lucent employee, describe to whom (person/company), when, where, why, and whether it was/will be under a non-disclosure agreement.

9. SUBMITTER #1: Eric H. Krosz

17 June 2003

Signature

Date

SUBMITTER #2: \_\_\_\_\_

Signature

Date

SUBMITTER #3: \_\_\_\_\_

Signature

Date

# ingress filtering

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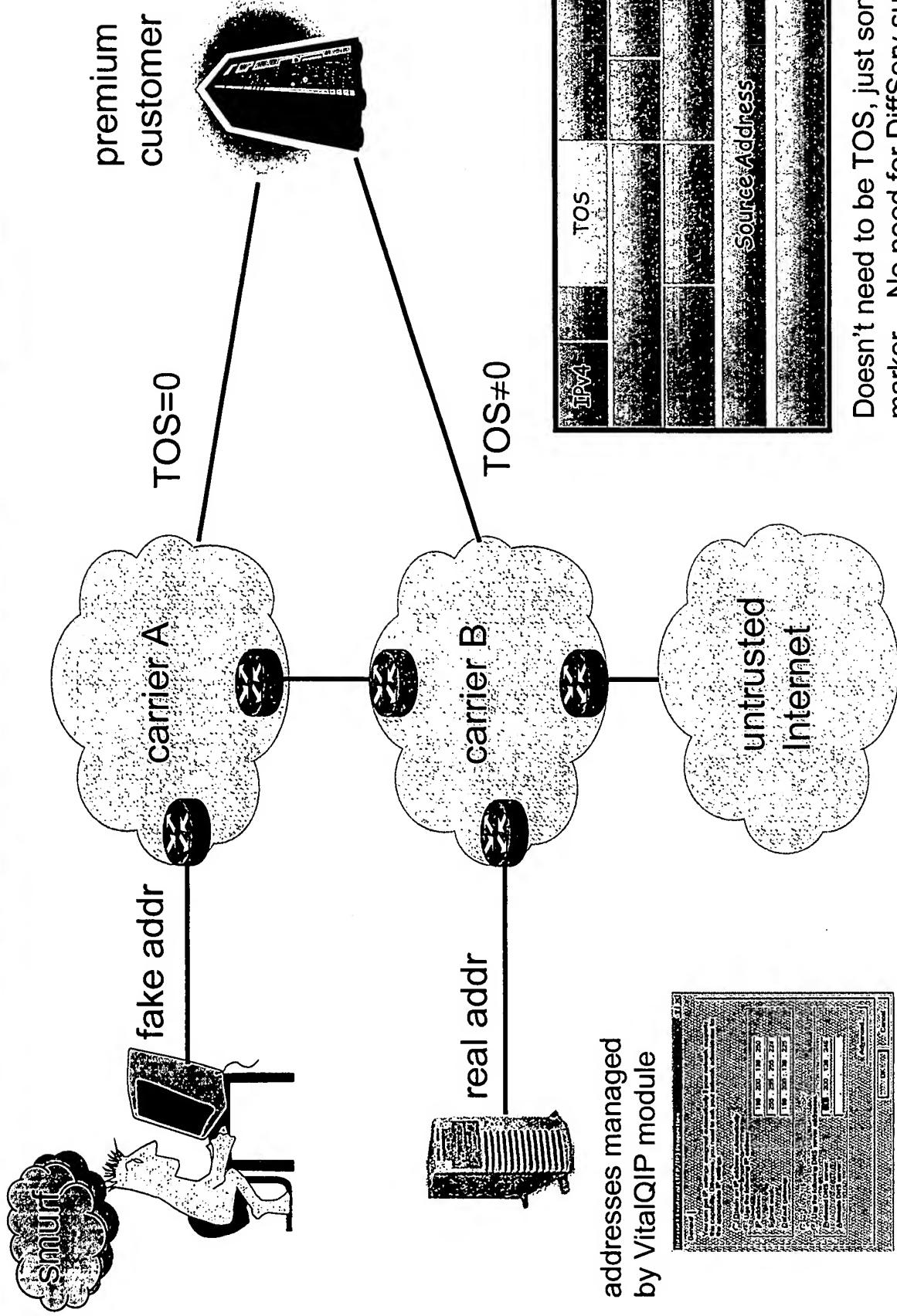
- ingress filtering is not popular
  - no revenue stream for carrier
  - worried about asymmetric routing, MobileIP
  - ineffective unless very widely deployed
- our variant can be deployed by a few carriers and deliver value to customers immediately, like voice CallerID

"In a perfect world, your ISP would detect and deal with the growing number of these attacks on its end. But because many ISPs do not want to take on the added burden and legal responsibility to provide, or claim to provide DoS protection, you'll most likely have to deal with DoS attacks on your own."

September 2002, Network World Fusion.

## IP CallerID

*network guarantee of packet origin*



# EXHIBIT B

Lucent Technologies  
Bell Labs Innovations

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## INTELLECTUAL PROPERTY-LAW

Subject: Patent Submission  
(IDS) No. 125986  
IP CallerID

date: August 6, 2003  
from: Kenneth M. Brown  
Room 3B-519  
(908) 582-5998  
[kmbrown1@lucent.com](mailto:kmbrown1@lucent.com)

To: E. Grosse,

The above-identified patent submission, of which you appear to be an originator, was submitted recently to consider its patentability. IP-Law is committed to being as responsive as possible regarding each submission. You will be contacted as soon as a decision is made on whether to file a patent application based on this submission.

Each decision to proceed with a patent application is based on a careful weighing of the commercial value that the prospective patent could bring to Lucent through the intellectual property rights that it represents. Because due time must be allowed for this initial evaluation as well as for information gathering, draft preparation, and review, you should not be surprised if it takes twenty weeks or more before your patent application is ready for filing in the United States Patent and Trademark Office.

Patent applications are drafted by an assigned attorney. The assigned attorney may be an in-house Lucent attorney or an outside attorney retained by Lucent. If an outside attorney is assigned, I will be the Lucent *managing attorney*. In that role, I will supervise the preparation of the application, and I will be available for consultation as necessary. Currently, over half of our patent applications are assigned to outside attorneys.

Please notify me of any further developments regarding the nature of the invention or its uses. In addition, it is important to keep me informed of any related work by others, within or outside of Lucent, that might use this subject matter. Also, please notify me well in advance of any disclosure of the invention to anyone outside of Lucent.

The booklet, *A Quick Guide to The Patent Process At Lucent Technologies* may prove helpful. Copies can be ordered from my secretary, Susan Schuchard, at 908-582-7121, e-mail [schu@lucent.com](mailto:schu@lucent.com).

If you have any administrative questions, please also contact Susan Schuchard. For substantive issues regarding the submission, please feel free to contact me directly. Please refer to the IDS number noted above in any communications.



Kenneth M. Brown

cc: W. Sweldens